Setting up a measurement.

Setting up a test

Select the frequency you want to test and then the intensity, and then click [Add] to add it to the test. Continue doing this until you have all the values you want to test. Then choose [Settings]>[Save test].
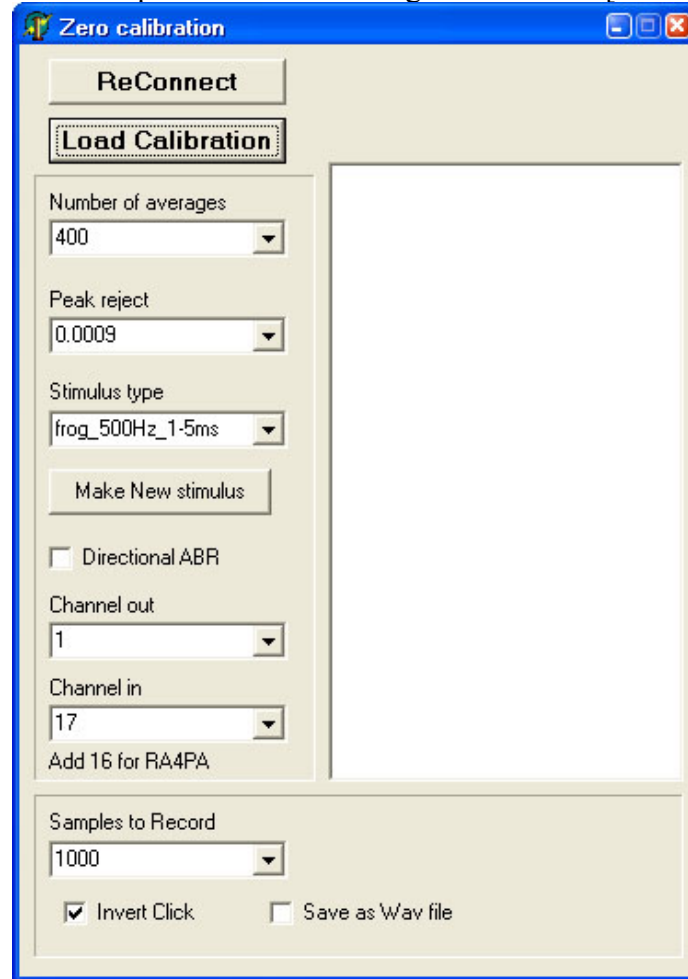Saving the test is not strictly necessary but now you can retrieve the test if something goes wrong.

HINT 1: If the frequency is set to 0 there will be no masker and it it will just be a normal ABR measurement.

HINT 2: you can change the click type by right clicking on a frequency and choosing a new stimulus type. This new stimulus will be used until a new is selected.

Setting up the TDT system

It is seldom necessary to change the settings for the TDT system but it is prudent to check them before starting a new series of experiments. The settings are found in [Settings]>[TDT settings].

Number of averages: The number of measurements at each intensity, higher numbers reduce the noise but increase the duration. A good starting value is 400 averages but there is large inter-species differences. Above 4000 averages there is usually no further gain by increasing the number of averages. A good rule of thumb is "the more brain activity the more averages" So a anesthetized lizard might require 40 averages but a awake human 4000 to get the same signal to noise ratio.

Peak reject: All recordings with a peak above this value is classified as movement noise. These values are rejected and a new value is measured. <u>WARNING:</u> If this value is set too low all recordings will be rejected and the system will continue to record until the pre-amplifier is turned off.

Stimulus type: Here you can choose different types of click stimulus. The most common are short clicks, but by using the [Make new stimulus] button you can generate stimuli that fits your specific purpose. For instance tone bursts or chirps.

Directional ABR: This will play the click from normal channel out and the masker from [channel out] + 1 making it possible to study the directional hearing of a subject.

Channel out: The output channel, should almost always be set to 1.

Channel in: The input channel for the ABR. CH 1 on the RA4PA is number 17, CH 2 is 18 and so on.

Samples to record: This is how many samples there should be recorded after the stimulus.

Invert click: should always be on except for testing purposes.

Save as WAV file: Saves the raw recording as a separate wav file, this can very quickly use up a lot of space and slow the system down.